Wilmington Town Selectmen Meeting AEM Survey Presentation October 26, 2020 James M. Cashwell

Talking Points

Slide 1:

- USEPA is requiring Olin to conduct additional investigation to resolve data gaps associated with Site groundwater.
- Our purpose this evening is to present one of the technologies to be used in this investigation for informational purposes only.
- USEPA has approved a work plan for a phased approach to the investigation.
- Part of the first phase will involve using a few different geophysical methods including aerial electromagnetic (AEM) surveying.
- An aerial survey is necessary for assessing bedrock topography under the Maple Meadow Brook Wetland because the wetland is flooded, and other forms of land-based assessment methods are not feasible.
- The method involves using a helicopter to traverse the subject area with an electromagnetic sensor at low altitude (~100 ft).
- USEPA approved this method as part of the data gaps work plan.
- The picture shows the general setup that we will employ.

Slide 2:

- The basis of the AEM method is that an electromagnetic signal will provide information relative
 to conductive subsurface features to then map those features to determine elevation
 measurements basically, it will provide a map of the bedrock surface.
- The flight elevation necessary to accomplish this is approximately 100 feet.
- It's a relatively small area, so the entire flight is expected to take approximately 2 hours to complete. From set up to landing should require about 5 hours.
- A Geophysicist will be on board the flight to observe the data as it is being collected.
- Once they land, the Geophysicist will do a quick check of the collected data for completeness. They will re-fly the area if any of the flight lines are missed inadvertently.

Slide 3:

This figure shows the planned flight lines. They are spaced approximately 50 feet apart to
provide thorough coverage of the area. You'll notice both subject areas in the figure. The
flight path will focus on non-residential areas.

To sum it up:

- This is an EPA-approved, straightforward, non-intrusive application that avoids disruption to the wetlands
- It's done in one day, and this application provides the valuable missing data